

ABSTRACT

A microcontroller has a nonvolatile memory that originally stores program code and has free space. When part of the program code needs to be modified, that part is disabled, and modified program code is stored in the free space. The modified program code is executed in place of the disabled program code. Program code can be disabled by changing instructions to a designated instruction, by storing the address of the disabled program code in the nonvolatile memory and loading this address into a disabled code detector, or by deleting the address of the disabled program code from an address list in the nonvolatile memory and adding the address of the modified program code to the list. In this way, the program stored in even a one-time-programmable microcontroller can be changed to meet altered specifications or correct program bugs.